

Merritt Parkway, Chestnut Hill Road/Route 53 Bridge
Spanning Chestnut Hill Road/Route 53
at the 19.66 mile mark on the Merritt Parkway
Norwalk
Fairfield County
Connecticut

HAER No. CT-97

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
U.S. Department of the Interior
P.O. Box 37127
Washington, D.C. 20013-7127

HISTORIC AMERICAN ENGINEERING RECORD

Merritt Parkway, Chestnut Hill Road/Route 53 Bridge

HAER No. CT-97

Location: Spanning Chestnut Hill Road/Route 53 at the 19.66 mile mark on the Merritt Parkway in Norwalk, Fairfield County, Connecticut

UTM: 18.634670.4557370

Quad: Norwalk North, Connecticut

Construction Date: 1938

Engineer: Connecticut Highway Department

Architect: George L. Dunkelberger, of the Connecticut Highway Department, acted as head architect for all Merritt Parkway bridges.

Contractor: Arute Brothers Construction Company
New Britain, Connecticut

Present Owner: Connecticut Department of Transportation
Wethersfield, Connecticut

Present Use: Used by traffic on the Merritt Parkway to cross Chestnut Hill Road/Route 53

Significance: The bridges of the Merritt Parkway were predominately inspired by the Art Deco and Art Moderne architectural styles of the 1930s. Experimental forming techniques were employed to create the ornamental characteristics of the bridges. This, combined with the philosophy of incorporating architecture into bridge design and the individuality of each structure, makes them distinctive.

Historians: Todd Thibodeau, HABS/HAER Historian
Corinne Smith, HAER Engineer
August 1992

For more detailed information on the Merritt Parkway, refer to the Merritt Parkway History Report, HAER No. CT-63.

LOCAL HISTORY

In 1640, Roger Ludlow acquired land along the east side of the Norwalk River from the Long Island Sound to twelve miles inland. A couple of months later Daniel Patrick, a friend of Ludlow, purchased a similar amount of acreage on the west side of the river. These two acquisitions encompassed all of present-day Norwalk.¹

Ten years passed between these purchases and settlement of the region. In 1650, Ludlow sold his land to residents of the Hartford Colony. That same year, these new owners moved to what is now East Norwalk, under the leadership of two surveyors, Richard Olmstead and Richard Webb. In 1651, Norwalk formed a town. The community gradually expanded as an agricultural and shipping center. At one point Norwalk included parts of Wilton, New Canaan, and Westport. By the beginning of the American Revolution, Norwalk included the districts of Norwalk, South Norwalk, East Norwalk, West Norwalk, Broad River, Silvermine, Winnipauk, and Cranbury.²

In summer 1779, the British burned more than 300 structures in the town. The community took several years to rebound from this loss, but by the early 1800s, Norwalk was again an expanding agricultural and shipping community. Larger scale industrial development commenced in 1848, when the New York, New Haven, and Hartford Railroad reached the Norwalk River. Norwalk became a hat-making center. The Volk Hat Company employed more than 500 workers. Other substantial enterprises developed, including the Norwalk Lock Company, Norwalk Iron Works, and Roth and Goldschmidt

¹———, This Is Norwalk (Norwalk: League of Women Voters, 1963), 5.

²Samuel Richard Weed, Norwalk After Two Hundred and Fifty Years (South Norwalk: C. A. Freeman Publishers, 1901), 18-19.

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Corset Company. Fueling this development was the arrival of large numbers of Irish and German immigrants.³

Following World War I, Norwalk experienced another population boom, as many New Yorkers who had vacationed in Norwalk for years settled permanently and began to commute. These new arrivals eagerly awaited completion of the Merritt Parkway. After it was finished, the parkway helped to accelerate the residential development of the western sections of the community, especially Winnipauk and Cranbury. During World War II watchtowers were established on the Merritt to spot airplanes and relay the information to Mitchell Field on Long Island.⁴

BRIDGE CONSTRUCTION HISTORY

Chestnut Hill Road starts at the Newtown Turnpike in Cranbury and proceeds north to Cedar Road near the region called Chestnut Hill. The Arute Brothers Construction Company of New Britain, Connecticut, received the contract to grade the Merritt Parkway from West Rocks Road, in Norwalk, to the Newtown Turnpike, in Westport (Condot project #180-54). The contract for the Chestnut Hill Road/Route 53 Bridge also went to the Arute Brothers Construction Company (Condot project #180-54).⁵ The bridge cost \$25,979 and was completed in 1938. The paving work for this region of the Merritt

³This Is Norwalk, 5-6.

⁴Deborah Wing Ray and Gloria P. Stewart, Norwalk Being an Historical Account of That Connecticut Town, (Canaan, NH: Phoenix Publishing, 1979), 194, 200.

⁵This Is Norwalk, 6.

"3000 Attend Merritt Parkway Opening; Hear Cross Voice Hope For Extension," Norwalk Hour, 30 June 1938, p. 1.

⁶Contract Card File, Map File and Engineering Records Department, Connecticut Department of Transportation, Wethersfield, CT.

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extended from West Rocks Road to the Newtown Turnpike. This contract was awarded to the New Haven Construction Company of New Haven, Connecticut (Condot project# 180-96). The Chestnut Hill Road/Route 53 Bridge has received little maintenance since it was built.⁶

BRIDGE DESCRIPTION

The Chestnut Hill Avenue Bridge is a single-span, reinforced-concrete, barrel-type rigid-frame bridge. The frame spans 35'-8" at a skew of 22°-20' over the road. The Merritt Parkway travels over the bridge on a 60' wide clear roadway at a 1.15 percent grade. Parallel wing walls of varying lengths form the approach for the overpass. Hexagonal pylons anchor each end of the wing wall, with the pylon at the abutment twice as large as that at the end of the wall.

The rigid-frame design allows the engineer to decrease the structural material at the center of the span, thus forming an arched opening. (See the Merritt Parkway History Report, HAER No. CT-63, for a more detailed description of the rigid-frame.) The intrados of the span rises 8' from the springline to the crown. The extrados curves to double the frame thickness from 12" at the crown to 24" at the leg. The springline is about 8' above the curb. A minimum clearance greater than 14'-1" is provided at a distance 10' perpendicular to the centerline of the road. The faces of the frame legs appear to have new concrete veneers.

⁶Chestnut Hill/Route 53 Bridge, DOT #725; Bridge Maintenance File, Engineering Department, Connecticut Department of Transportation, Newington, CT.

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Weed, Samuel Richard. Norwalk After Two Hundred and Fifty Years, An Account of the Celebration of the 250th Anniversary of the Charter of the Town. South Norwalk: C. A. Freeman Publishers, 1901.

-----, This Is Norwalk. Norwalk: League of Women Voters, 1963.

Norwalk Hour. 1937-38.

-----, Contract Card File. Map File and Engineering Records Department, Connecticut Department of Transportation: Wethersfield, CT. This includes construction drawings, copies of which are in the HAER field records.

-----, Bridge Maintenance File. Engineering Department, Connecticut Department of Transportation: Newington, CT.

PROJECT INFORMATION

This recording project was undertaken by the Historic American Buildings Survey and the Historic American Engineering Record (HABS/HAER) Division of the National Park Service, Robert J. Kapsch, Chief. The Merritt Parkway recording project was sponsored and funded by the Connecticut Department of Transportation (ConnDot) and the Federal Highway Administration.

The fieldwork, measured drawings, historical reports and photographs were prepared under the general direction of Eric N. DeLony, HAER Chief, and Sara Amy Leach, HABS Historian.

The recording team consisted of Jacqueline A. Salame (Columbia University), architect and field supervisor; Mary Elizabeth Clark (Pratt Institute) and B. Devon Perkins (Yale University), architectural technicians; Joanne McAllister-Hewlings (US/ICOMOS-Great Britain, University of Sheffield), landscape architect; Corinne Smith (Cornell University), engineer; Gabrielle M. Esperdy (City University of New York) and Todd Thibodeau (Arizona State University), historians; and Jet Lowe, HAER photographer.